

Inorganic and Organic Chemistry
SYNTHESIS OF CHEMICAL SENSORS FOR APOPTOTIC CELLS

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The chemical sensor was synthesized this summer using a 14-step process. Most steps were run under air free and water free conditions. Each structure was confirmed using ^1H NMR and thin layer chromatography. This compound was synthesized for the purpose of binding to multiple phosphor lipids found in the bilayer of the cell membrane during the process of apoptosis. When this sensor binds to an apoptotic cell, it gives off a fluorescent reading that is different from the readings obtained when the sensor is not bound to anything.

